

**Amendment of the Application Title**

Please amend the title of this application to read as follows:

- AUTOMATED ADAPTIVE CLASSIFICATION SYSTEM FOR NON-  
PROBABILISTIC KNOWLEDGE NETWORKS -

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A computer-implemented mapping method of classifying a plurality of informational items in an information retrieval system, the method comprising the steps of:

detecting an access of a first informational item;

detecting an access of a second informational item;

establishing that a relationship link exists between said first informational item and said second informational item;

determining a non-probabilistic weight based on the historical frequency of said relationship link; and

applying an ensemble of clustering algorithms directly proportional to said non-probabilistic weight of ~~to the combination of said first informational item and said second informational item~~ said relationship link.

~~establishing that a relationship link exists between said first informational item and said second informational item; and .~~  
~~determining a non-probabilistic weight for said relationship link, said weight proportional to the historical frequency of the selection of the combination of informational items.~~

2. (original) The method as recited in claim 1 wherein said step of detecting the second informational item includes the detecting of a plurality of informational items.

3. (previously cancelled)

26. (new) The method as recited in claim 1, wherein said non-probabilistic weight is a relationship strength having an integer value.

4. (previously amended) The method as recited in claim 2, further comprising the step of:

applying an algorithm for data aging wherein the usage of the relationship link is monitored and used as feed back for the weight associated with the relationship link.

27. (new) The method as recited in claim 4, wherein said algorithm for data aging runs as a function of traffic load to age the relationship links according to relevance of the relationship links.

5. (previously amended) The method as recited in claim 4, further comprising the step of:

applying a pruning algorithm wherein external information regarding the usefulness of at least one relationship link is utilized to modify the weight or existence of a recorded relationship link.

6. (currently amended) The method as recited in claim 5, wherein said pruning algorithm ~~is repeatedly applied to determine if a recorded relationship link should be ignored or placed in a list of bad links~~ performs the removal of irrelevant relationship links subsequent to the data aging feed back process.

7. (original) The method as recited in claim 5, wherein said pruning algorithm makes use of a user determined feedback of the usefulness of a relationship link.

8. (original) The method as recited in claim 2, wherein said ensemble includes a plurality of algorithms and wherein said relationship link is weighted in direct proportion to the number of algorithms within said ensemble of algorithms that determine the existence of said relationship link.

9. (original) The method as recited in claim 2, wherein said relationship link is positioned in a list in direct proportion to the degree of consensus among said ensemble of algorithms.

10. (original) The method as recited in claim 2, wherein said ensemble includes a plurality of algorithms and wherein each algorithm within said ensemble of algorithms runs independently of all other algorithms.

11. (original) The method as recited in claim 2, further comprising the step of merging the outputs of said ensemble of algorithms.

12. (currently amended) The method as recited in claim 2, further comprising the step of recording said relationship link in a ~~Bayesian-type~~ non-probabilistic ~~N~~network.

13. (previously cancelled)

14. (previously amended) An apparatus for providing classification of informational items in an information retrieval system comprising:

means for detecting the access of informational items;

means for applying an ensemble of clustering algorithms to the accessed informational items;

means for establishing the existence of relationship links between said informational items to enhance the effectiveness of said system;  
and

means for weighting said relationship links, said weight being directly proportional to the outcome of said ensemble of algorithms.

15. (previously presented) The apparatus of claim 14 including:

means for aging said relationship links; and

means for pruning said relationship links.

16. (currently amended) The apparatus of claim 15 including means for merging the resulting output of said ensemble of algorithms into a ~~Bayesian-type~~ non-probabilistic ~~N~~network.

17. (original) A computer readable storage medium having stored thereon a computer program for implementing a method of classifying a plurality of information items in an information retrieval system, said computer program comprising a set of instructions for implementing the steps recited in claim 2.

18. (currently amended) The computer readable storage medium according to claim 17, wherein said computer program further comprises one or more instructions for clustering the resulting output of said ensemble of algorithms into a ~~Bayesian-type~~ non-probabilistic ~~N~~network.

19. (original) The computer readable storage medium according to claim 17, wherein said computer program further comprises one or more instructions for improving the usefulness of said relationship links through weighting of said relationship links.

20. (original) The computer readable storage medium according to claim 17, wherein said computer program further comprises one or more instructions for improving the usefulness of said relationship links through pruning of said relationship links.

21. (original) The computer readable storage medium according to claim 17, wherein said computer program further comprises one or more instructions for improving the usefulness of said relationship links through aging of said relationship links.

22. (original) The computer readable storage medium according to claim 17, wherein said computer program further comprises one or more instructions for improving the usefulness of said relationship links through weighting, pruning and aging of said relationship links.

23. (previously amended) A method for retrieving help information in a system where informational items are not fixedly mapped to one another comprising the steps of:

determining an efficient path to arrive at a particular help item of interest;

and

storing a context in which a help item is sought as well as the path to said help item so that said context and path are available when said system is accessed by any subsequent user.

24. (original) The method as recited in claim 23, further comprising the step of reexamining and dynamically changing said efficient path to a particular help item upon subsequent help item searches or retrieval.

25. (original) The method as recited in claim 23, wherein said efficient path is determined based on said context in which said help item was sought.